WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE···SOIL CONSERVATION SERVICE

and

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above in cooperation with other Federal, State and private organizations.

AS OF
MAY 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P O Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia

WATER SUPPLY OUTLOOK FOR OREGON

and

FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

MAY 8, 1970

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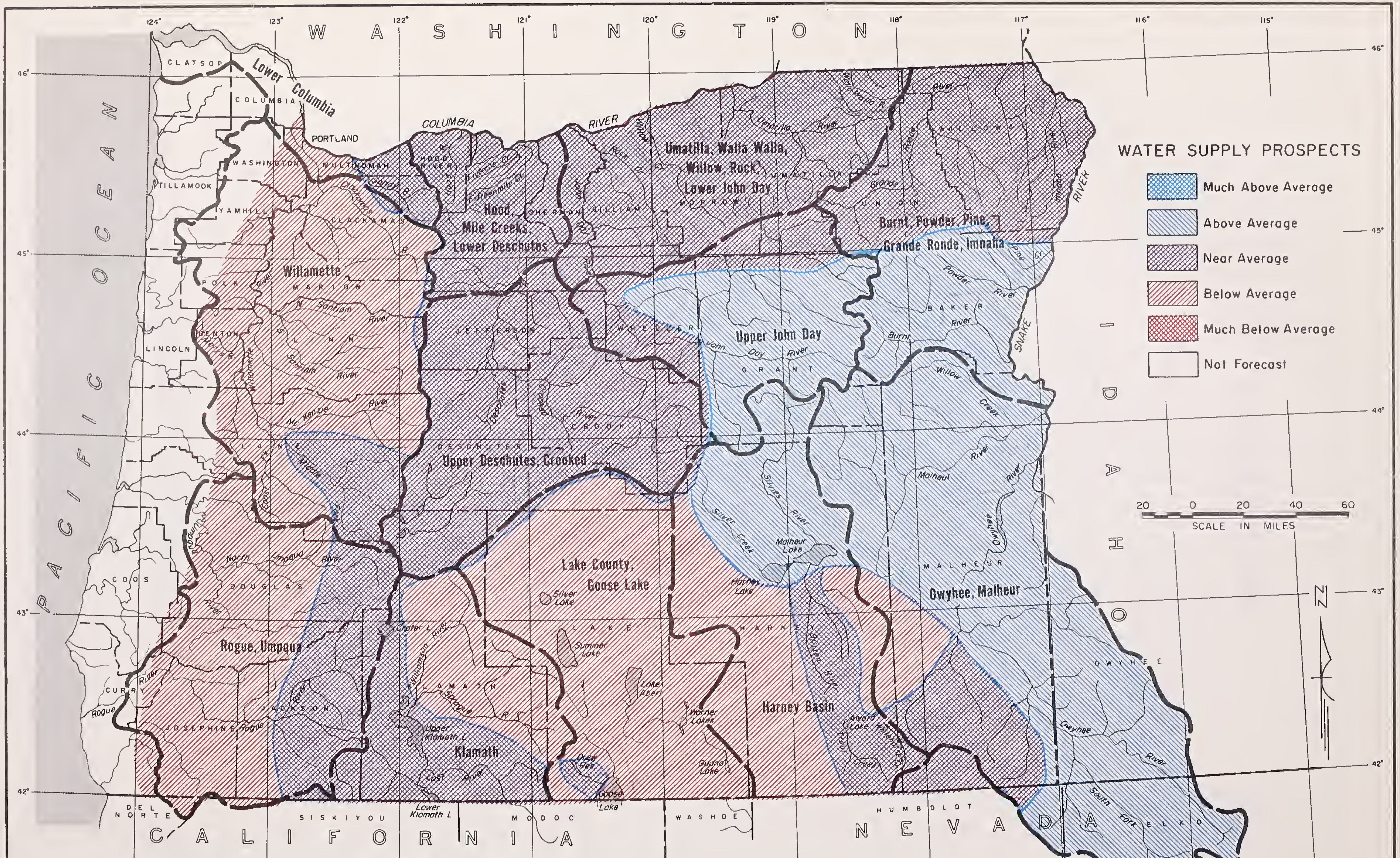


WATER SUPPLY PROSPECTS for OREGON

Spring and Summer Period

MAY 1, 1970

WATER SUPPLY OUTLOOK for OREGON

MAY 1, 1970

Oregon's farmers, ranchers, and other water users will have summer water supplies ranging from fair to excellent. Fair supplies will be available to users diverting from streams heading at low elevations along the Cascades and in south-central Oregon. Average conditions are forecast for the rest of the state, except in Baker, Grant, and the northern part of Harney and Malheur Counties, which will have an excellent supply of water. Most irrigation reservoirs are full and will provide adequate amounts to users with access.

SNOW COVER

Much below average temperatures kept the snow cover from melting the usual amounts during April. Many snow courses reported water contents nearly the same as last month. The May 1 snow cover ranged from 200 to 300 percent of average in eastern Oregon down to 50 to 90 percent of average in south-central counties and in the Cascades.

PRECIPITATION

Only the Willamette Valley received above average precipitation during the month. Southwestern Oregon rainfall was near normal but the rest of the state ranged on down to amounts only 30 to 50 percent of average.

RESERVOIR STORAGE

Most reservoirs are full now with the exception of Wallowa Lake and Crescent Lake in eastern Oregon, which are about one-half full. On May 1 twenty-six reservoirs were storing 2,937,700 acre feet of water. This is 118 percent of what is usually stored on this date.

STREAMFLOW

Streamflow was about one-half of normal during April due to lack of snow-melt from cold temperatures.

continued on next page

continued--

Prospective May-September runoff from representative streams is as follows:

	Forecast 1000's A.F.	Percent 1953-67 Average
Owyhee net Inflow	260	145
Malheur near Drewsey	57	168
Umatilla at Pendleton	71	89
Grande Ronde at La Grande	104	99
Upper Klamath Lake net Inflow	312	81
Rogue near Raygold	580	84
Willamette, Mid. Fk. below N. Fk.	486	82
Deschutes at Benham Falls	410	80
John Day, Mid. Fk. near Ritter	105	142
Silvies near Burns	62	151

This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, U. S. Weather Bureau and other cooperators.

WATER SUPPLY OUTLOOK
OWYHEE, MALHEUR WATERSHEDS
OREGON

as of

MAY 1, 1970

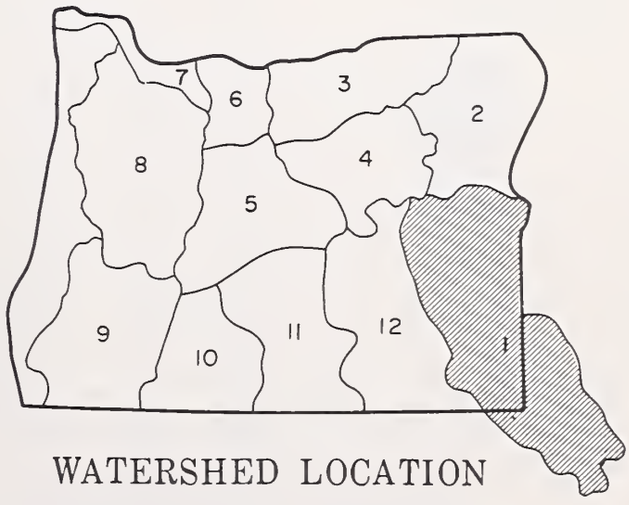
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

EXCELLENT TO AVERAGE WATER SUPPLIES ARE IN PROSPECT FOR WATER USERS IN MALHEUR COUNTY THIS SUMMER. RESERVOIRS ARE NEARLY FULL. BELOW SEASONAL TEMPERATURES DURING APRIL RETARDED SNOWMELT AND THE REMAINING SNOWPACK RANGES FROM 211 PERCENT OF AVERAGE ON THE UPPER MALHEUR TO A LITTLE OVER 300 PERCENT ON THE UPPER OWYHEE RIVER AND JORDAN CREEK. SUMMER STREAMFLOW (MAY-SEPTEMBER) FORECASTS RANGE FROM 145 PERCENT ON THE OWYHEE INFLOW TO 168 ON THE MALHEUR NEAR DREWSEY. THE OWYHEE INFLOW WAS 42 PERCENT OF THE APRIL AVERAGE. PRECIPITATION IN THE OWYHEE AND MALHEUR BASINS WAS 70 PERCENT OF AVERAGE DURING APRIL.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Boulder Creek	Excellent	Average
Bully Creek	Excellent	Average
Cow Creek	Average	Average
Jordan Creek	Excellent	Average
Jordan Valley Irrig. Dist.	Excellent	Average
McDermitt Creek	Average	Average
Oregon Canyon Creek	Average	Average
Owyhee Project	Excellent	Excellent
Succor Creek	Average	Average
Tenmile Creek	Average	Average
Vale-Oregon Irrig. Dist.	Excellent	Average
Warmsprings Irrig. Dist.	Excellent	Average
Willow Creek (Reservoired)	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Jordan Creek above Lone Tree Creek	75	156	May-July	[b]	48
Malheur near Drewsey	56	170	May-July	22	33
	57	168	May-Sept.	23	34
Malheur, North Fork at Beulah [d]	52	158	May-July	35	33
	57	150	May-Sept.	41	38
Owyhee Reservoir net Inflow [k]	240	150	May-July	196	160
	260	145	May-Sept.	214	179

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000	June 8	May 24
	250	June 28	June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Agency Valley	60.0	58.6	57.4	50.1
Antelope	55.0	55.0	56.0*	30.7
Bully Creek	30.0	28.6	30.0	20.6
Owyhee	715.0	696.4	699.2	531.9
Warmsprings	191.0	175.0	152.1	137.2

*May 6

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [m]
Jordan Creek	1	98	-
Malheur River	3	100	98
Owyhee River	2	85	81

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Jordan Creek	2	210	319
Malheur River	3	372	211
Owyhee River	3	314	314

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS

OREGON

as of

MAY 1, 1970

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

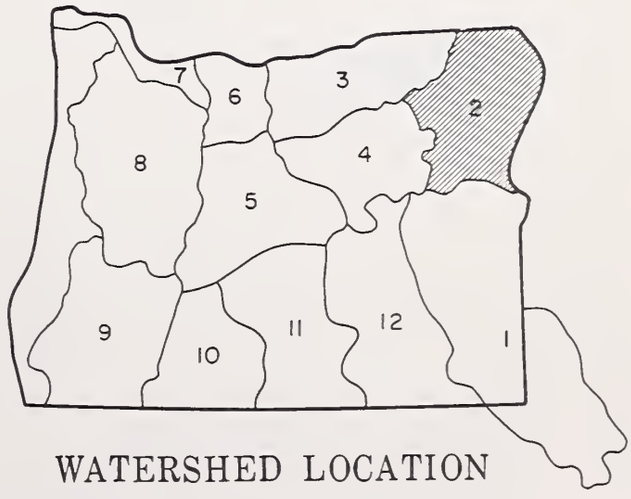
GENERAL OUTLOOK

NORTHEASTERN OREGON WATER USERS WILL HAVE EXCELLENT SUMMER WATER SUPPLIES. BELOW NORMAL TEMPERATURES DURING APRIL REDUCED SNOWMELT. AS A RESULT THE SNOWPACK NOW RANGES FROM 138 PERCENT OF AVERAGE ON THE UPPER WALLOWA, IMNAHA, AND CATHERINE CREEK DRAINAGES TO 210 ON THE BURNT RIVER DRAINAGE. MAY-SEPTEMBER STREAMFLOW FORECASTS RANGE FROM 99 PERCENT ON THE GRANDE RONDE TO 168 PERCENT FOR THE BURNT RIVER NEAR HEREFORD. RESERVOIRS ARE STORING ABOVE AVERAGE AMOUNTS OF WATER WITH THE EXCEPTION OF WALLOWA LAKE WHICH IS HOLDING 62 PERCENT OF THE AVERAGE AMOUNT. PRECIPITATION DURING APRIL WAS 41 PERCENT OF NORMAL. THE GRANDE RONDE AT LA GRANDE FLOWED 53 PERCENT OF AVERAGE. SOILS ARE WELL WETTED AND WILL ENHANCE RUNOFF FROM ANY SPRING PRECIPITATION.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Alder Slope	Excellent	Average
Baker Valley	Excellent	Average
Big Creek	Excellent	Average
Clover Cr. (nr. N. Powder)	Average	Average
Cove	Excellent	Average
Durkee	Excellent	Average
Eagle Valley	Excellent	Average
Elgin	Average	Average
Enterprise-Joseph	Average	Average
Hereford-Bridgeport	Excellent	Average
Imnaha River	Average	Average
LaGrande-Island City	Average	Average
Lostine-Wallowa	Average	Average
No. Powder River-Wolf Creek	Excellent	Average
Pine Valley	Excellent	Average
Powder River-Elk Creek	Excellent	Average
Summerville	Average	Average
Sumpter Valley	Excellent	Average
Union-Hot Lake	Average	Average
Unity	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Bear near Wallowa	57	100	May-Sept.	[b]	57
Burnt near Hereford [d]	25	175	May-July	[b]	14.3
	26	168	May-Sept.	[b]	15.5
Catherine near Union	56	108	May-Sept.	53	52
Eagle Creek above Skull Creek	175	122	May-July	149	143
	188	120	May-Sept.	163	156
Grande Ronde at La Grande	100	99	May-July	116	101
	104	99	May-Sept.	119	105
Hurricane Creek near Joseph	45	100	May-Sept.	[b]	45
Imnaha at Imnaha	239	106	May-Sept.	[b]	225
Lostine near Lostine	125	108	May-Sept.	[b]	116
Powder River near Baker	64	152	May-July	[b]	42
	66	150	May-Sept.	[b]	44
Wallowa, East Fork near Joseph [d]	8.7	100	May-July	[b]	8.7
	11.2	100	May-Sept.	[b]	11.2

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [m]
Burnt, Powder	2	99	107
Grande Ronde, Catherine Creek, Imnaha River	3	97	106

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Thief Valley	17.4	17.4	17.4	- -
Unity	25.2	25.6	25.2	24.1
Wallowa Lake	37.5	16.1	33.5	25.9
Phillips Lake	73.5	53.2	39.6	- -

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Grande Ronde River above La Grande	4	120	153
Wallowa, Imnaha-Catherine Creek	6	135	138
Powder River	5	191	166
Burnt River	4	234	210

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS
OREGON

as of

MAY 1, 1970

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

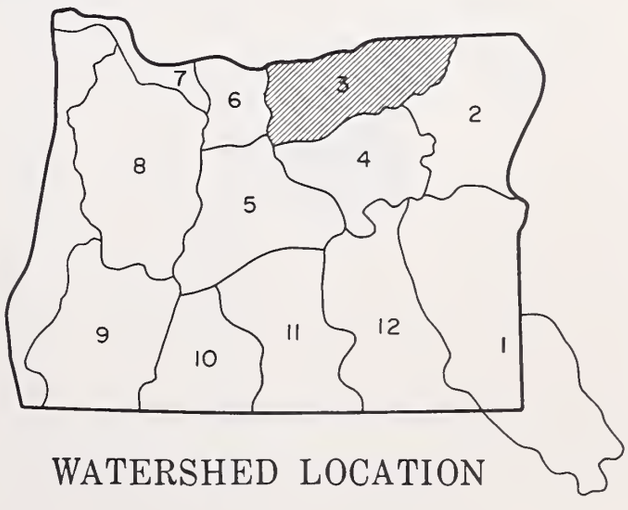
GENERAL OUTLOOK

WATER SUPPLIES WILL BE AVERAGE FOR WATER USERS WITH DIRECT STREAM DIVERSIONS IN NORTHCENTRAL OREGON. WATER USERS WITH STORED WATER WILL HAVE EXCELLENT EARLY SUMMER SUPPLIES. THE MOUNTAIN SNOWPACK IS 185 PERCENT OF AVERAGE ON THE McKAY WATERSHED AND 214 PERCENT OF NORMAL ON THE WALLA WALLA WATERSHED. THIS IS DUE MAINLY TO BELOW NORMAL TEMPERATURES DURING APRIL AND A RESULTANT LACK OF SNOWMELT. PRECIPITATION DURING APRIL WAS 87 PERCENT OF AVERAGE. SOIL MOISTURE IS GOOD ON THE UPPER WATERSHEDS. SUMMER STREAMFLOW FORECASTS RANGE FROM 117 PERCENT OF AVERAGE FOR THE WALLA WALLA, NORTH FORK NEAR MILTON, TO 73 PERCENT OF AVERAGE FOR THE McKAY NEAR PILOT ROCK. RESERVOIRS ARE NEARLY FULL. THE FLOW OF THE UMATILLA NEAR PENDLETON WAS 86 PERCENT OF AVERAGE DURING APRIL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Walla Walla River, No. Fork	Average	Average
Walla Walla River, So. Fork	Average	Average
Walla Walla River, Main	Average	Average
Walla Walla River, Little	Average	Average
Couse Creek	Average	Average
Dry Creek	Average	Average
Pine Creek	Average	Average
Umatilla River, Main	Average	Average
Wildhorse Creek	Average	Average
Umatilla R. (Cold Springs Reservoir)	Excellent	Average
Umatilla R. (McKay Res.)	Excellent	Average
McKay Creek	Average	Average
Birch Creek	Average	Average
Butter Creek	Average	Average
Willow Creek	Average	Average
Rhea Creek	Average	Average
Rock Creek (John Day Tributary)	Average	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Butter Creek near Pine City	4.0	100	May-July	[b]	4.0
McKay near Pilot Rock	8.0	73	May-Sept.	[b]	11.0
Umatilla River near Gibbon	46	110	May-July	[b]	42
	52	108	May-Sept.	[b]	48
Umatilla River at Pendleton	65	87	May-July	85	75
	71	89	May-Sept.	89	80
Walla Walla, No. Fork near Milton	9.4	115	May-July	[b]	8.2
	10.2	117	May-Sept.	[b]	8.7
Walla Walla, So. Fork near Milton	41	108	May-July	38	38
	55	110	May-Sept.	50	50

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	June 6	June 22

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Cold Springs	50.0	50.0	49.7	49.7
McKay	73.8	69.4	70.8	57.7

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [m]
Umatilla, Walla Walla, McKay Creek	3	102	102

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
McKay Creek	3	187	185
Umatilla River	3	278	195
Walla Walla River	2	324	214

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
UPPER JOHN DAY WATERSHEDS
OREGON

as of

MAY 1, 1970

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

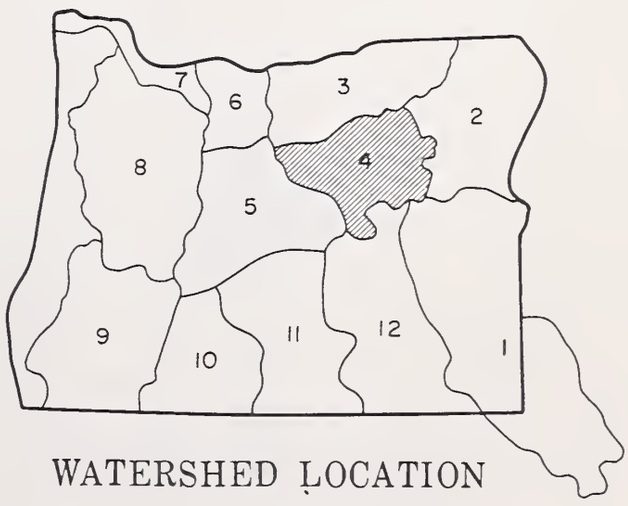
GENERAL OUTLOOK

WATER SUPPLIES FOR THE UPPER JOHN DAY BASIN WILL BE EXCELLENT TO AVERAGE THIS SPRING AND SUMMER. BELOW NORMAL APRIL TEMPERATURES KEPT THE MOUNTAIN SNOWPACK FROM MELTING USUAL AMOUNTS. IT IS NOW 200 PERCENT OF THE MAY 1 AVERAGE. WATERSHED SOILS ARE WELL WETTED. APRIL PRECIPITATION WAS 34 PERCENT OF AVERAGE. MAY-SEPTEMBER STREAMFLOW FORECASTS RANGE FROM 142 PERCENT FOR THE MIDDLE FORK OF THE JOHN DAY AT RITTER TO 118 PERCENT OF AVERAGE ON STRAWBERRY CREEK NEAR PRAIRIE CITY. THE JOHN DAY AT SERVICE CREEK FLOW WAS 52 PERCENT OF AVERAGE DURING APRIL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Beech Creek	Average	Average
Beech Creek-Fox-Long Cr.	Average	Average
Bridge-Mountain Creeks	Average	Average
Camas Creek	Average	Average
Cherry Creek	Fair	Fair
Indian-Pine Creeks	Excellent	Average
John Day River, Main Fork	Excellent	Average
John Day River, Mid. Fork	Excellent	Average
John Day River, N. Fork	Excellent	Average
John Day River, S. Fork	Excellent	Average
Monument-Kimberly	Excellent	Average
Strawberry Creek	Excellent	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average *i*
John Day at Prairie City	42	140	May-July	*b*	30
	45	132	May-Sept.	*b*	34
John Day, Middle Fork at Ritter	101	144	May-July	74	70
	105	142	May-Sept.	77	74
Strawberry near Prairie City	9.1	118	Apr.-July	4.6	7.7
	9.9	118	Apr.-Sept.	5.1	8.4

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average *m*
John Day abv. Dayville	6	97	101
John Day, North Fork	2	103	106

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average *i*
John Day River, No. Fk.	7	244	198
John Day abv. Dayville	5	296	202

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
UPPER DESCHUTES, CROOKED WATERSHEDS
OREGON

as of
MAY 1, 1970

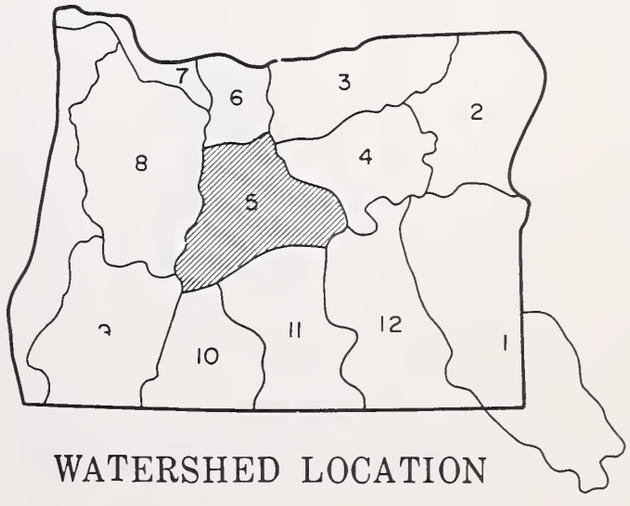
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

UPPER DESCHUTES AND CROOKED RIVER WATER SUPPLIES WILL BE AVERAGE TO FAIR THIS SUMMER. THE MOUNTAIN SNOWPACK IS 93 PERCENT OF AVERAGE ON THE DESCHUTES. LITTLE MELTING OCCURRED DURING APRIL DUE TO LOW TEMPERATURES. THE APRIL RAINFALL WAS 58 PERCENT OF AVERAGE. UPPER WATERSHED SOILS ARE WELL WETTED. AREA FORECASTS FOR THE MAY-SEPTEMBER PERIOD RANGE FROM 80 PERCENT OF AVERAGE FOR THE DESCHUTES RIVER NEAR BENHAM FALLS UP TO 138 PERCENT OF AVERAGE FOR THE CROOKED RIVER NEAR POST. CRANE PRAIRIE AND WICKIUP RESERVOIRS ARE HOLDING 96 PERCENT OF THE NORMAL MAY 1 STORAGE. OCHOCO AND PRINEVILLE RESERVOIRS ARE HOLDING HOLDING 109 PERCENT OF THE NORMAL MAY 1 STORAGE. THE DESCHUTES AT MOODY FLOW WAS 82 PERCENT OF AVERAGE DURING APRIL.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Arnold Irrigation District	Average	Fair
Bear Creek	Fair	Fair
Beaver Creek	Fair	Fair
Camp Creek	Fair	Fair
Central Ore. Irrig. Dist.	Average	Fair
Crooked River	Average	Average
Deschutes River	Average	Average
Hay-Trout Creeks	Fair	Fair
Lone Pine Irrig. Dist.	Average	Average
Mill Creek	Fair	Fair
North Unit Irrig. Dist.	Average	Average
Ochoco Creek	Fair	Fair
Sisters Irrigation Dist.	Average	Average
Snow Creek Irrig. Dist.	Average	Average
Squaw Creek Irrig. Dist.	Average	Fair
Swalley Ditch	Excellent	Excellent
Tumalo Project	Average	Average
Walker Basin Irrig. Dist.	Average	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Crane Prairie Reservoir total Inflow	56	82	May-July	61	68
	90	81	May-Sept.	99	111
Crescent at Crescent Lake [d]	15.2	82	May-July	b	18.5
	20	83	May-Sept.	b	24
Crooked near Post	53	139	May-July	b	38
	55	138	May-Sept.	b	40
Deschutes at Benham Falls [d]	250	82	May-July	272	305
	410	80	May-Sept.	449	509
Deschutes below Snow Creek	45	76	May-Sept.	50	59
Deschutes, Little near La Pine [d]	42	69	May-July	62	61
	51	70	May-Sept.	67	73
Ochoco Reservoir net Inflow	5.6	46	May-Sept.	b	12.1
Odell near Crescent	22	88	May-Sept.	24	25
Squaw near Sisters	45	96	May-Sept.	48	47
Tumalo near Bend [d]	42	98	May-Sept.	38	43

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	July 12	July 15
Deschutes at Bend	1500	June 12	July 1
Little Deschutes near La Pine	400	May 27	June 7
	200	June 14	July 8

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Crane Prairie	55.3	38.3	31.5	45.8
Crescent Lake	86.9	44.2	32.6	50.7
Ochoco	47.5	46.5	33.8	38.5
Prineville	153.0	155.6	153.6	147.1 [m]
Wickiup	200.0	191.2	162.8	193.7

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [m]
Crooked River, Upper Deschutes River	1	98	101

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Crooked, Ochoco	-	--	--
Deschutes abv. Wickiup	2	101	93
Little Deschutes	4	81	90
Tumalo & Squaw Creeks	3	96	98

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS
OREGON

as of

MAY 1, 1970

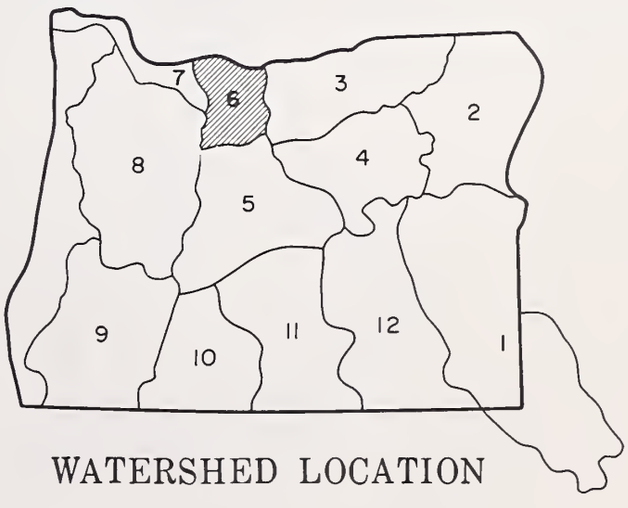
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

NEAR AVERAGE WATER SUPPLIES ARE FORECAST FOR THIS AREA DURING THE COMING SEASON. MUCH BELOW NORMAL TEMPERATURES WERE OBSERVED DURING APRIL. PRECIPITATION WAS 75 PERCENT OF AVERAGE. MELTING OF THE SNOWPACK WAS DELAYED BY THE COLD WEATHER. THE SNOW COVER IS CURRENTLY NEAR THE MAY 1 AVERAGE. IT WAS 70 PERCENT OF AVERAGE APRIL 1. MAY-SEPTEMBER STREAMFLOW WILL BE SLIGHTLY BELOW AVERAGE. STORAGE IN WASCO RESERVOIR IS EXCELLENT FOR MAY 1.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Aldridge Ditch (Tony Creek)	Average	Average
Badger Creek	Average	Average
Dee Irrigation District	Average	Average
East Fork Irrig. Dist.	Average	Average
Farmers Irrigation District	Average	Average
Hood River Irrig. District	Average	Average
Juniper Flat	Average	Average
Middle Fork Irrig. District	Average	Average
Mile Creeks	Average	Average
Mill Creek	Average	Average
Mount Hood Irrig. Dist.	Average	Average
Rock-Gate-Threemile Crs.	Average	Average
Tygh Creek	Average	Average
White River	Average	Average



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Hood near Hood River	163	86	May-July	[b]	189
	210	86	May-Sept.	[b]	243
Hood, West Fork near Dee	81	90	May-July	137	90
	101	90	May-Sept.	159	112
White below Tygh Valley	76	88	May-July	[b]	86
	91	88	May-Sept.	[b]	103

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*33	July 15-31	

*Average cfs forecast to flow for this two-week period.

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Clear Lake (Wasco)	11.9	7.4	4.1	4.9

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [m]
Hood River, Mile Creeks	1	101	--

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Hood River	3	97	99
Mile Creeks	-	--	--
White River	3	97	99

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
LOWER COLUMBIA WATERSHEDS
OREGON

as of

MAY 1, 1970

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

THERE HAS BEEN A GENERAL IMPROVEMENT IN THE WATER SUPPLY OUTLOOK FOR THE COLUMBIA BASIN DURING APRIL. VERY COOL WEATHER DELAYED SNOWMELT AND RUNOFF, LEAVING MORE RUNOFF TO COME DURING THE BALANCE OF THE SEASON. HEAVY STREAMFLOW IS EXPECTED IN EASTERN OREGON AND SOUTHWESTERN IDAHO. MOST OTHER STREAMS WILL PRODUCE FLOWS 80-120 PERCENT OF AVERAGE WITH A FEW EXCEPTIONS AT THE UPPER REACHES OF THE BASIN. FLOW OF THE COLUMBIA AT THE DALLES WAS ONLY 60 PERCENT OF AVERAGE DURING APRIL. SOME OF THE FLOW THAT SHOULD HAVE COME IN APRIL WILL NOW OCCUR IN MAY. AS A RESULT, STREAMFLOW AND STAGES FROM THE DALLES TO ASTORIA, INSTEAD OF BEING BELOW AVERAGE AS FORECAST LAST MONTH, SHOULD NOW BE NEAR AVERAGE DURING THE MAY-SEPTEMBER PERIOD.

COLUMBIA RIVER BASIN

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SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average *i*
Sandy River	2	79	99

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average *i*
Columbia at The Dalles	51,950	87	May–June		59,688
	82,350	89	May–Sept.		92,457

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW[d] (1,000 A.F.) APR. — SEPT.	APR. — JUNE	MAY — JUNE	PEAK (1,000 c.f.s)	DATE
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,903	65,112	622	June 10
1953-67 Avg.	105,181	72,408	59,689	574	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s)	DRAINAGE DISTRICT PUMPHOUSE SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES 118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.

WATER SUPPLY OUTLOOK
WILLAMETTE WATERSHEDS
OREGON

as of

MAY 1, 1970

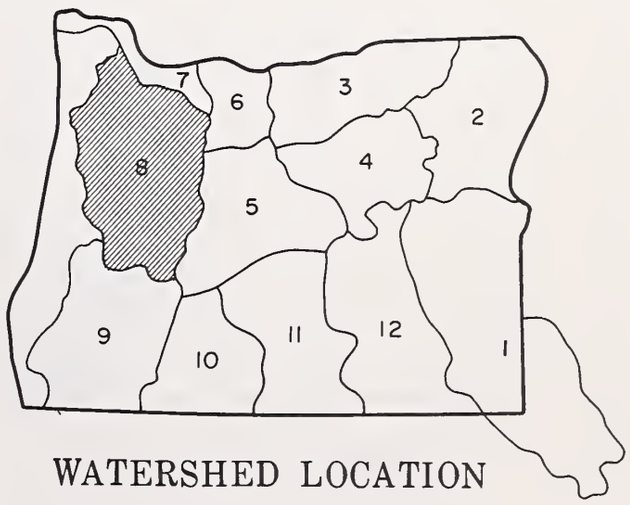
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

FAIR TO AVERAGE WATER SUPPLIES ARE FORECAST FOR THE WILLAMETTE VALLEY THIS SUMMER. COLD TEMPERATURES PREVAILED DURING APRIL, DELAYING THE MELT OF THE SNOWPACK. STREAMFLOWS WILL BE SOMEWHAT HIGHER DURING MAY THAN WAS FORECAST LAST MONTH. PRECIPITATION DURING APRIL WAS 137 PERCENT OF AVERAGE. THE SNOWPACK IS 85 PERCENT OF AVERAGE FOR MAY. THIS WAS THE WET SPOT IN OREGON FOR APRIL. STREAMFLOW WAS LOW HOWEVER DUE TO THE COLD TEMPERATURES. THE MIDDLE FORK OF THE WILLAMETTE PRODUCED 62 PERCENT OF AVERAGE FLOW. RESERVOIR STORAGE IS GOOD FOR MAY 1.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Calapooya	Fair	Fair
Clackamas	Fair	Fair
McKenzie	Fair	Fair
Molalla	Fair	Fair
Santiam, North	Fair	Fair
Santiam, South	Fair	Fair
Willamette, Coast Fork	Fair	Fair
Willamette, Middle Fork	Average	Fair



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Clackamas at Big Bottom	76	80	May-July	[b]	95
	102	80	May-Sept.	[b]	127
Clackamas at Estacada	335	73	May-July	[b]	455
	447	78	May-Sept.	[b]	566
Clackamas above Three Lynx	247	71	May-July	[b]	348
	342	77	May-Sept.	[b]	442
McKenzie at McKenzie Bridge	365	78	April-July	[b]	465
	457	74	April-Sept.	[b]	614
McKenzie near Vida	588	80	May-July	[b]	754
	800	81	May-Sept.	[b]	989
Oak Grove Fork above Power Intake	96	77	April-July	[b]	125
	126	77	April-Sept.	[b]	163
Row near Dorena	76	72	April-July	[b]	106
	81	74	April-Sept.	[b]	110
Santiam, North at Mehama [d]	338	66	May-July	[b]	513
	405	66	May-Sept.	[b]	614
Santiam, South at Waterloo	411	69	April-July	[b]	596
	426	67	April-Sept.	[b]	633
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge [d]	402	82	May-July	[b]	490
	486	82	May-Sept.	[b]	593
Willamette at Salem [d]	2273	83	May-July	[b]	2783
	2760	84	May-Sept.	[b]	3286

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Cottage Grove	30.0*	23.5	22.7	24.0
Cougar	155.2*	117.6	128.7	- -
Detroit	299.9*	260.1	242.2	231.8
Dorena	70.5*	61.9	53.9	53.8
Fall Creek	115.0*	104.6	13.2	- -
Fern Ridge	94.2*	80.6	79.6	86.6
Foster	30.0*	23.6	25.0	- -
Green Peter	270.0*	236.5	228.4	- -
Hills Creek	200.0*	159.2	141.0	163.1 [m]
Lookout Point	337.2*	267.0	227.4	290.3 [m]
Timothy Lake	61.7	61.4	51.1	55.3 [m]

*Multiple purpose reservoir--space reserved primarily for flood runoff.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Clackamas River	2	32	71
McKenzie River	3	52	69
Row River	2	50	65
Santiam River	4	49	70
Willamette, Mid. Fk.	4	69	84

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
ROGUE, UMPQUA, WATERSHEDS
OREGON

as of

MAY 1, 1970

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

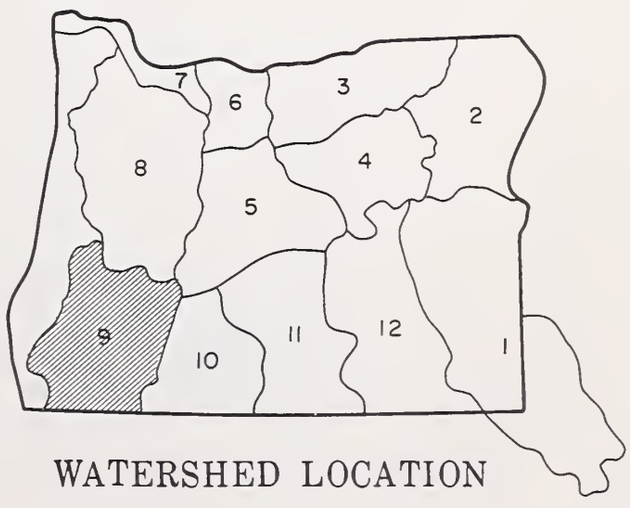
GENERAL OUTLOOK

FAIR WATER SUPPLIES ARE FORECAST FOR WATER USERS WITHOUT RIGHTS TO STORED SUPPLIES THIS SUMMER. MOST RESERVOIRS ARE FULL, HOWEVER, AND WILL PROVIDE ADEQUATE SUPPLIES TO IRRIGATORS WITH ACCESS. COLD TEMPERATURES PREVAILED DURING APRIL AND DELAYED THE MELT OF THE HIGH ELEVATION SNOWPACK. THE SNOW COVER IS NOW 60 TO 80 PERCENT OF AVERAGE COMPARED TO LAST MONTH'S 20 TO 80 PERCENT. PRECIPITATION DURING APRIL WAS 110 PERCENT OF NORMAL. FLOW OF THE ROGUE AT RAYGOLD WAS 56 PERCENT.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Althouse Creek	Fair	Fair
Applegate River, Big	Fair	Fair
Applegate River, Little	Fair	Fair
Ashland Creek	Average	Average
Butte Creek, Big	Fair	Fair
Butte Creek, Little	Fair	Fair
Cow Creek	Fair	Fair
Deer Creek	Fair	Fair
Elk Creek	Fair	Fair
Emigrant Creek (abv. Res.)	Fair	Fair
Evans Creek	Fair	Fair
Gold Hill Irrigation Dist.	Average	Fair
Grants Pass Irrig. District	Average	Fair
Grave Creek	Fair	Fair
Illinois River, East Fork	Fair	Fair
Illinois River, West Fork	Fair	Fair
Jump-off-Joe Creek	Fair	Fair
Neil Creek	Average	Average
Red Blanket Creek	Average	Fair
Rogue River	Average	Fair
Sucker Creek	Fair	Fair
Table Rock Irrig. Dist.	Average	Fair
Thompson Creek	Fair	Fair
Wagner Creek	Average	Average
Williams Creek	Fair	Fair



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Applegate near Copper [d]	108	77	April-Sept.	[b]	140
Clearwater above Trap Creek [d]	55	91	May-Sept.	[b]	60
Fourmile Lake net Inflow	3.4	83	April-Sept.	[b]	4.1
Hyatt Reservoir net Inflow [d]	2.0	80	May-Sept.	[b]	2.4
Illinois River near Kerby	65	70	May-July	[b]	93
	71	71	May-Sept.	[b]	99
Little Butte, N. Fk. at Fish Lake nr. Lake Cr. [d]	9.0	73	May-Sept.	[b]	12.3
Little Butte, S. Fk. near Lake Creek	22	67	April-July	[b]	33
Rogue above Prospect	153	80	May-July	[b]	192
	200	80	May-Sept.	[b]	249
Rogue, South Fork near Prospect [d]	39	84	May-July	[b]	46
	48	84	May-Sept.	[b]	57
Rogue River below South Fork	337	81	May-July	[b]	413
	466	84	May-Sept.	[b]	551
Rogue at Raygold near Central Point	440	84	May-July	582	525
	580	84	May-Sept.	731	685
Rogue at Grants Pass [d]	549	83	May-Sept.	[b]	662
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls	130	88	May-Sept.	[b]	147

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Rogue at Raygold	1200	July 23	Aug. 7
Little Butte Creek, South Fork	100	--	May 27

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Emigrant Lake*	39.0	39.0	38.6	36.7
Fish Lake	7.8	6.2	4.1	6.4
Fourmile Lake	16.1	12.7	5.4	11.8
Howard Prairie	60.0	60.6	42.1	40.1[m]
Hyatt Prairie	16.1	16.2	13.4	14.2

*Average for years of record (in base period) after reconstruction.

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON

as of

MAY 1, 1970

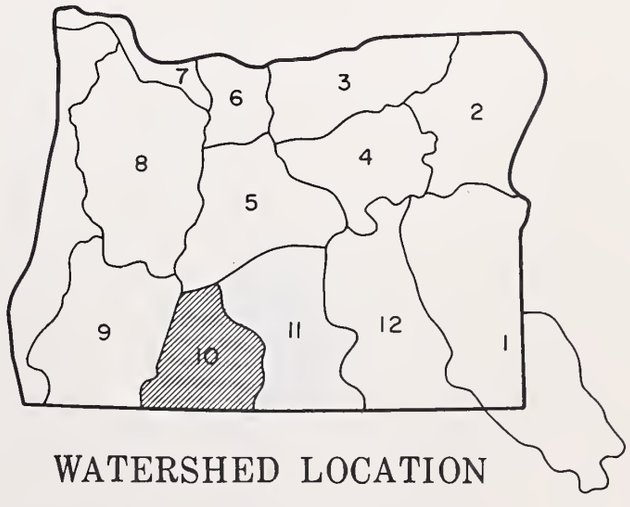
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

THE MAY 1 WATER SUPPLY OUTLOOK FOR KLAMATH COUNTY REMAINS THE SAME AS LAST MONTH -- EXCELLENT SUPPLIES FOR USERS WITH STORAGE AND FAIR FOR THOSE WITHOUT. COLD TEMPERATURES PREVAILED DURING APRIL, DELAYING THE MELT OF THE HIGH ELEVATION SNOWPACK. AS A RESULT OF THIS FLOWS IN MAY WILL BE SOMEWHAT HIGHER THAN WAS EXPECTED LAST MONTH. THE SNOW COVER IS FAIR IN THE CASCADES AND POOR ON THE EAST SIDE OF THE COUNTY. PRECIPITATION WAS ONLY 40 PERCENT OF NORMAL DURING APRIL. INFLOW TO UPPER KLAMATH WAS 60 PERCENT OF AVERAGE.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ft. Klamath Valley	Average	Fair
Lost River (Clear Lake)	Excellent	Average
Lost River (Gerber)	Excellent	Average
Lost River (Willow Res.)	Excellent	Average
Sprague River	Fair	Fair
Upper Klamath Lake	Excellent	Average
Williamson River	Fair	Fair



WATERSHED LOCATION

Report prepared by
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1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Clear Lake Reservoir Inflow	10.6	70	May-Sept.	[b]	15.1
Gerber Reservoir Inflow	3.5	70	May-Sept.	[b]	5.0
Sprague near Chiloquin	146	70	May-Sept.	[b]	208
Upper Klamath Lake net Inflow [k]	312	81	May-Sept.	352	386
Williamson below Sprague River	254	77	May-Sept.	[b]	331

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	Average [m]
Upper Klamath	2	99	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Last Year	Average [i]
Clear Lake	440.2	367.1	329.6	266.5
Gerber	94.0	91.2	90.4	65.5
Upper Klamath Lake	584.0	553.0	555.7	519.2

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	Average [i]
Lost River	2	69	135
Sprague River	3	0	0
Upper Klamath River	6	46	67
Williamson River	3	65	77

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE LAKE WATERSHEDS
OREGON

as of

MAY 1, 1970

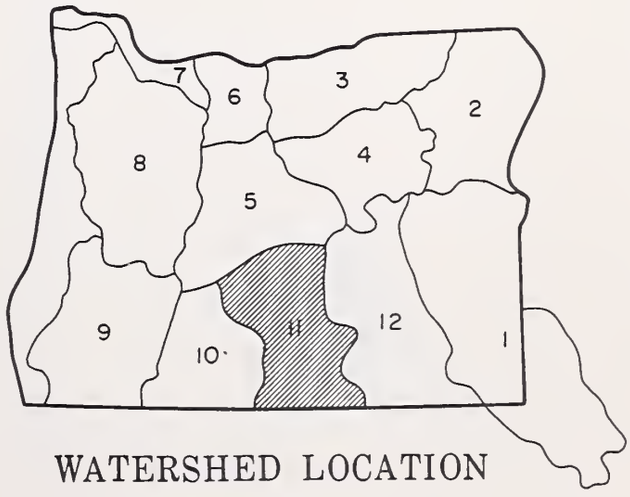
U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

GENERAL OUTLOOK

FAIR WATER SUPPLIES ARE FORECAST FOR LAKE COUNTY USERS WITHOUT STORAGE RIGHTS DURING THE COMING SEASON. EXCELLENT SUPPLIES ARE AVAILABLE FROM DREWS AND COTTONWOOD RESERVOIRS WHICH ARE BOTH FULL. THE SNOW COVER IS GONE EXCEPT AT THE HIGHEST ELEVATIONS AND STREAMFLOW WILL NOW DROP OFF RAPIDLY. PRECIPITATION DURING APRIL WAS ONLY 51 PERCENT OF NORMAL. TEMPERATURES WERE BELOW AVERAGE.

WATER SUPPLY OUTLOOK Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Chewaucan River	Average	Fair
Crooked Creek	Average	Fair
Deep Creek	Fair	Fair
Dry Creek	Fair	Fair
East Side Goose Lake	Fair	Fair
Guano Lake	Fair	Fair
Honey Creek	Fair	Fair
Lakeview Water Users Assn.	Excellent	Average
Rock Creek (Hart Mountain)	Fair	Fair
Silver-Buck Creeks	Fair	Fair
Summer Lake	Fair	Fair
Thomas Creek	Fair	Fair
Twentymile Creek	Fair	Fair
Warner Lakes	Fair	Fair



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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average [i]
Chewaucan near Paisley	47	82	May-July	[b]	58
	51	82	May-Sept.	[b]	62
Deep above Adel	36	85	May-July	[b]	42
	37	85	May-Sept.	[b]	44
Drews Reservoir net Inflow [d]	7.2	64	May-Sept.	[b]	11.3
Honey near Plush	8.1	77	May-July	[b]	10.5
	8.2	77	May-Sept.	[b]	10.7
Silver Creek near Silver Lake	7.5	62	May-July	[b]	12.1
	7.7	55	May-Sept.	[b]	14.0
Twentymile near Adel	5.7	62	May-July	[b]	9.6
	6.2	62	May-Sept.	[b]	10.0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average [m]
Chewaucan, Silver Creek, Drew Creek	1	102	106
Honey, Deep, 20-mile Crs.	1	96	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage This Year	Usable Storage Last Year	Usable Storage Average [i]
Cottonwood*	8.7	8.7	8.3	5.8
Drews	63.0	63.7	67.0	54.3
Thompson Valley	19.5	[b]	[b]	14.8

*Average for years of record (in base period) after reconstruction.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average [i]
Chewaucan River	2	0	0
Deep Creek	2	66	120
Drew Creek	2	0	0
Honey Creek	1	22	32
Silver Creek	-	--	--
Twenty Mile Creek	-	--	--

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK
HARNEY BASIN WATERSHEDS
OREGON

as of
MAY 1, 1970

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ··· OREGON STATE ENGINEER

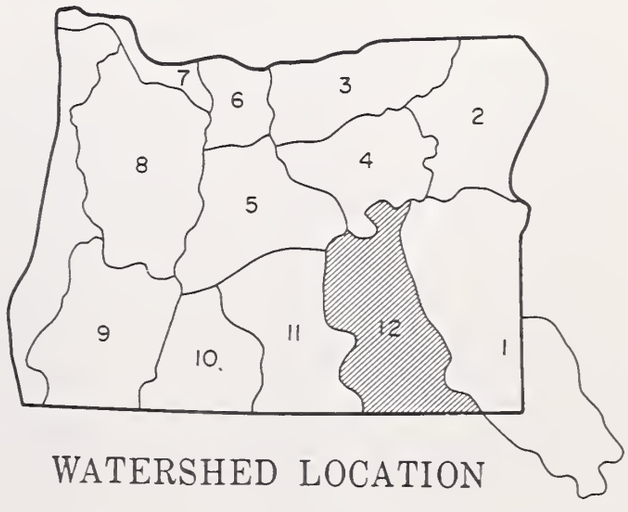
GENERAL OUTLOOK

HARNEY BASIN WATER USERS WILL HAVE AVERAGE WATER SUPPLIES FROM STREAMS HEADING HIGH IN THE STEENS MOUNTAINS AND AVERAGE TO EXCELLENT SUPPLIES FROM STREAMS DRAINING THE NORTH END OF THE BASIN. THE MAY 1 SNOW-PACK ON THE UPPER SILVIES RIVER IS 223 PERCENT OF NORMAL DUE TO LACK OF MELTING FROM BELOW NORMAL TEMPERATURES DURING APRIL. RAINFALL IN THE BASIN DURING APRIL WAS 45 PERCENT OF NORMAL. UPPER WATERSHED SOILS ARE WELL WETTED. STREAMFLOW FORECASTS FOR THE MAY-SEPTEMBER PERIOD RANGE FROM 102 PERCENT OF AVERAGE FOR THE DONNER UND BLITZEN NEAR FRENCHGLEN TO 151 PERCENT FOR THE SILVIES NEAR BURNS.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Catlow Valley	Average	Fair
Cow Creek	Excellent	Average
Donner und Blitzen River	Average	Average
Mill-Coffeepot Creeks	Excellent	Average
Rattlesnake Creek	Excellent	Average
Silver Creek	Excellent	Average
Silvies River	Excellent	Average
Soldier-Prather Creek	Excellent	Average
Trout Creek	Average	Average
Whitehorse Creek	Average	Average



WATERSHED LOCATION

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STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR FORECAST Thousand Acre Feet	THIS YEAR FORECAST Percent of Average	FORECAST PERIOD	PAST RECORD THOUSAND ACRE FEET Last Year	PAST RECORD THOUSAND ACRE FEET Average i
Donner und Blitzen near Frenchglen	40	100	May-July	49	40
	46	102	May-Sept.	53	45
Silver near Riley	10.0	149	May-July	4.9	6.7
Silvies near Burns	60	154	May-July	23	39
	62	151	May-Sept.	25	41
Trout near Denio	4.3	78	May-July	8.9	5.5
	4.6	77	May-Sept.	9.4	6.0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF: Last Year	THIS YEAR'S MOISTURE as PERCENT OF: Average m
Silvies River, Silver Cr.	2	97	102
Trout Cr., Donner und Blitzen River	-	-	-

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF Last Year	THIS YEAR'S SNOW WATER AS PERCENT OF Average i
Donner und Blitzen R.	-	--	--
Silver Creek	-	--	--
Silvies River	4	500	223
Trout Creek	-	--	--

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 1

MAY 1, 1970

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	c				
Battle Creek (Ida.)	c				
Bear Creek (Nev.)	4/30	78	26.3	20.3	19.4[h]
Big Bend (Nev.)	4/27	19	5.1	0.0	0.9[h]
Blue Mountain Springs	4/29	42	18.6	5.0	8.4
Buck Pasture[e]	c				
Buckskin, Lower (Nev.)	c				
Buckskin, Upper (Nev.)	c				
Bull Basin[e] (Ida.)	c				
Bully Creek[e]	c				
Call Meadow[e]	c				
Columbia Basin[e]	c				
Cottonwood-Indian[e]	c				
Crane Prairie	4/29	13	5.7	- -	- -
Crow Camp[e]	c				
Disaster Peak (Nev.)	c				
Eldorado Pass	4/30	0	0.0	0.0	0.0[m]
Fawn Creek[e] (Nev.)	c				
Fish Creek	c				
Flag Prairie	c				
Fox Creek (Nev.)	c				
Fry Canyon (Nev.)	4/27	14	4.7	0.0	1.0[h]
Gold Creek (Nev.)	4/27	14	4.4	0.0	0.0[h]
Granite Peak (Nev.)	c				
Hyde Pasture[e] (Ida.)	c				
Jack Creek, Lower (Nev.)	4/28	T	T	0.0	0.2[h]
Jack Creek, Upper (Nev.)	4/28	24	8.7	0.0	3.5[h]
Jack Peak (Nev.)	4/28	56	20.7	21.7	26.6[h]
Lake Creek R.S.	4/29	18	7.5	- -	- -
Lake Creek (New Tangent)	4/29	17	7.2	- -	- -
Laurel Draw (Nev.)	4/24	16	6.3	- -	- -
Logan Valley[e]	c				
Lookout Butte[e]	c				
Louse Canyon[e]	c				
Martin Creek (Nev.)	c				
Merritt Mountain[e] (Nev.)	c				
Midas (Nev.)	c				
Mud Flat (Ida.)	c				
Oregon Canyon	c				
Quinn Ridge[e] (Nev.)	c				
Red Canyon[e] (Ida.)	c				
Rock Spring	4/29	T	T	0.0	0.4[m]
Rodeo Flat (Nev.)	4/27	13	3.0	0.0	1.2[h]
76 Creek (Nev.)	c				
Silver City (Ida.)	5/1	52	20.5	11.2	6.7[h]
Silvies	c				
South Mountain (Ida.)	5/1	37	15.2	5.8	- -
Stag Mountain (Nev.)	c				
Stinking Water	5/1	0	0.0	0.0	- -
Succor Creek[e] (Ida.)	c				
Taylor Canyon (Nev.)	4/27	T	T	0.0	0.1[h]
Toe Jam[e] (Nev.)	c				
Tremewan Ranch (Nev.)	4/27	T	T	0.0	- -
Triangle[e] (Ida.)	c				
Trout Creek[e]	c				
"V" Lake[e]	c				
Vaught Ranch[e] (Ida.)	c				
War Eagle[e] (Ida.)	c				

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #1	4/27	121	44.8	39.8	39.7[m]
Aneroid Lake #2	4/28	113	40.0	36.6	34.7[h]
Anthony Lake	4/30	100	38.8	26.6	30.3[h]
Bald Mountain[e] (Ore.)	4/29	102	37.7	13.6	20.1[m]
Beaver Reservoir	4/29	30	10.6	13.0	6.9
Big Sheep[e]	4/29	72	26.6	20.2	22.0[m]
Blue Mountain Summit	4/30	14	5.6	1.3	1.9
Bourne	4/29	33	14.3	1.6	7.7[h]
County Line	4/30	3	1.0	0.0	1.0[h]
Dooley Mountain	4/27	14	5.3	1.3	1.9[h]
Eilertson Meadows	4/28	28	11.1	3.3	4.5[h]
Eldorado Pass	4/30	0	0.0	0.0	0.0[m]
Gold Center	4/29	31	12.7	0.5	4.2[h]
Goodrich Lake	4/30	117	51.4	- -	27.0[h]
Intake House	4/28	21	8.3	5.3	- -
Little Alps	4/30	55	19.6	14.9	13.1[h]
Little Antone	4/30	0	0.0	0.0	- -
Lucky Strike	4/29	44	14.6	10.5	8.5[h]
Meacham	4/30	12	4.6	0.5	2.1
Mirror Lake[e]	4/29	240	84.0	69.1	74.5[m]
Moss Springs	4/29	90	32.4	21.6	21.2[h]
Power Plant	4/28	0	0.0	0.0	- -
Schneider Meadows	4/28	79	33.8	20.9	24.3[h]
Schoolmarm	4/30	0	0.0	0.0	0.6[h]
Standley[e]	4/29	128	47.4	36.2	31.6[m]
Taylor Green	4/29	52	20.8	11.4	- -
Tipton	4/30	21	8.6	0.0	1.6[h]
Tollgate	4/29	82	34.3	13.8	18.0
TV Ridge[e]	4/29	82	30.3	21.2	- -
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	4/30	30	11.8	0.0	2.8[h]
Battle Mountain Summit	5/1	T	T	0.0	0.3[m]
Blue Mountain Camp	4/29	27	11.4	0.3	3.3[h]
Emigrant Springs	4/30	7	2.5	0.6	1.1[m]
Lucky Strike	4/29	44	14.6	10.5	8.5[h]
Meacham	4/30	12	4.6	0.5	2.1
Tollgate	4/29	82	34.3	13.8	18.0
Walla Walla Diversion	DISCONTINUED				
Weston Mountain	4/29	0	0.0	0.0	0.0[m]
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	4/30	100	38.8	26.6	30.3[h]
Arbuckle Mountain	4/30	30	11.8	0.0	2.8[h]
Battle Mountain Summit	5/1	T	T	0.0	0.3[m]
Beech Creek Summit	4/27	T	T	0.0	0.6[h]
Blue Mountain Springs	4/29	42	18.6	5.0	8.4[h]
Blue Mountain Summit	4/30	14	5.6	1.3	1.9
Derr	c				
East Fork Canyon[e]	c				
Gold Center	4/29	31	12.7	0.5	4.2[h]
Indian Creek Butte[e]					
Izee Summit	4/27	12	4.7	0.0	1.8[h]
Lucky Strike	4/29	44	14.6	10.5	8.5[h]
Marks Creek	4/23	0	0.0	T	T[h]
Ochoco Meadows	c				
Olive Lake[e]	5/2	64	26.9	19.2	16.5[h]
Schoolmarm	4/30	0	0.0	0.0	0.6[h]
Snow Mountain	c				
Starr Ridge	4/27	4	1.7	0.0	0.6[h]
Tipton	4/30	21	8.6	0.0	1.6[h]
Williams Ranch	c				

BASIC DATA SUPPLEMENT 1

MAY 1, 1970

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[1]
UPPER DESCHUTES, CROOKED WATERSHEDS					
Black Pine Spring	5/1	0	0.0	0.0	0.3
Caldwell Ranch	c				
Cascade Summit	4/27	63	22.8	30.7	25.3
Chemult	4/30	0	0.0	0.1	0.8 h
Deer Creek	c				
Derr	c				
Hogg Pass	4/30	95	37.4	49.1	41.6
Hungry Flat	4/28	0	0.0	0.0	0.0
Irish-Taylor	c				
Marks Creek	4/23	0	0.0	T	T h
Mowich	4/29	0	0.0	0.0	0.0 h
New Crescent Lake	4/29	11	4.1	5.3	5.1
New Dutchman Flat #2	4/28	114	50.4	49.8	54.3
Ochoco Meadows	c				
Snow Mountain	c				
Tamarack	c				
Tangent	4/28	30	13.9	10.9	11.9
Three Creek Butte	5/1	1	0.6	1.6	2.6 h
Three Creek Meadow	5/1	39	16.0	19.0	13.2
Waldo Lake	c				
Willamette Pass	4/30	102	39.9	46.6	42.4
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows	c				
Clear Lake	4/30	14	5.1	15.7	4.8 h
Clear Lake (Experimental)	4/30	23	9.2	17.6	12.4 h
Cooper Spur	4/30	0	0.0	T	- -
Cooper Spur (Alternate)	4/30	0	0.0	- -	- -
Greenpoint Reservoir	4/27	31	12.2	- -	- -
Knebal Springs	c				
Parkdale	c				
Phlox Point	4/30	148	63.1	72.9	65.6
Red Hill	c				
Still Creek	4/30	50	20.4	33.0	19.0
Switchback	c				
Tilly Jane	c				
Ulrich Ranch Junction	c				
Umbrella Falls	4/30	156	72.1	79.7	- -
Upper Valley	c				
WILLAMETTE WATERSHEDS					
Cascade Summit	4/27	63	22.8	30.7	25.3
Champion	5/1	49	19.3	37.7	26.3 h
Clackamas Lake	c				
Clear Lake	4/30	14	5.1	15.7	4.8 h
Clear Lake (Experimental)	4/30	23	9.2	17.6	12.4 h
Dead Horse Grade	4/28	13	1.5	22.7	11.9 h
Detroit (City)	4/30	0	0.0	0.0	0.0
Detroit Dam	4/30	0	0.0	0.0	0.0
Golden Curry Creek	5/1	0	0.0	0.0	3.1 m
Hogg Pass	4/30	95	37.4	49.1	41.6
Laurel Mountain	c				
Layng Creek	5/1	0	0.0	0.0	0.0 m
Lost Creek Ranch	4/28	0	0.0	0.0	0.0 h
Lund Park	5/1	0	0.0	0.0	0.0 m
Marion Forks	4/30	T	T	13.9	3.5 h
Mary's Peak	c			28.6	7.4 m
Mary's Peak (Alternate)	c			- -	- -
McCredie Springs	4/27	0	0.0	0.0	0.0
McKenzie	4/28	96	38.6	54.5	45.2 h
(Continued)					

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[1]
WILLAMETTE WATERSHEDS (Continued)					
McKenzie Bridge	4/28	0	0.0	0.0	0.0 h
Meridian Dam	4/27	0	0.0	0.0	0.0
Mill City	4/30	0	0.0	0.0	0.0
Oakridge	4/27	0	0.0	0.0	0.0
Peavine Ridge	4/29	25	8.2	25.1	13.9 h
Phlox Point	4/30	148	63.1	72.9	65.6
Railroad Overpass	4/27	0	0.0	0.0	T
Salt Creek Falls	4/27	15	3.2	18.0	10.2
Santiam Junction	4/30	9	2.6	18.7	12.1
Still Creek	4/30	50	20.4	33.0	19.0
Timothy Lake	c				
Valsetz Summit	c				
Vida	4/28	0	0.0	0.0	0.0 h
Waldo Lake	c				
Weaver Creek	5/1	0	0.0	0.0	0.0 m
White Branch Slide	4/28	2	0.3	T	1.1 h
Whitewater Bridge	4/30	0	0.0	0.0	T
Willamette Pass	4/30	102	39.9	46.6	42.4
ROGUE, UMPQUA WATERSHEDS					
Althouse	c				
Annie Spring	4/30	112	50.1	53.5	43.1
Beaver Dam Creek	5/1	0	0.0	- -	- -
Big Red Mountain	c				
Billie Creek Divide	4/30	23	9.3	22.7	13.9 h
Caliban	4/28	89	36.2	42.0	- -
Champion	5/1	49	19.3	37.7	26.3 h
Cold Springs Camp	4/28	74	29.7	41.5	- -
Deadwood Junction	5/1	0	0.0	0.0	- -
Diamond-Crater Summit	4/24	66	27.6	37.0	36.1 h
Diamond-Crater Sum. (Alt.)	4/24	65	25.6	- -	- -
Diamond Lake	4/24	36	14.6	21.8	16.8
Fish Lake	4/24	0	0.0	14.6	5.1 m
Fourmile Lake	4/30	46	20.2	27.8	21.6 h
Grayback Peak	c				
Howard Prairie	5/1	0	0.0	0.0	- -
Hyatt Prairie Reservoir	c				
King Mountain #1	4/29	9	1.8	7.4	- -
King Mountain #2	4/29	1	0.5	3.6	- -
King Mountain #3	4/29	0	0.0	0.0	- -
King Mountain #4	4/29	0	0.0	0.0	- -
King Mountain #5	4/29	0	0.0	0.0	- -
King Mountain #6	4/29	0	0.0	0.0	- -
Little Red Mountain	c				
Mt. Ashland Switchback	4/28	91	34.3	38.2	- -
Mule Creek	4/28	6	1.2	1.9	- -
North Umpqua	4/29	T	T	3.4	5.3 h
Page Mountain	c				
Park Headquarters	4/29	142	62.2	68.4	59.1
Red Butte #1	4/28	16	3.8	22.8	12.6 h
Red Butte #2	4/28	9	1.8	6.8	3.7 h
Red Butte #3	4/28	1	0.6	0.0	1.2 h
Red Butte #4	4/28	0	0.0	0.0	0.0 m
Red Butte #5	4/28	0	0.0	0.0	0.0 m
Red Butte #6	4/28	0	0.0	0.0	0.0 m
Seven Lakes #2	c				
Seven Mile	c				
Silver Burn	4/30	0	0.0	9.2	3.0 h
Siskiyou Summit	4/29	0	0.0	0.0	- -
Siskiyou Summit (Alt.)	4/29	0	0.0	- -	- -
Ski Bowl Road	4/28	52	21.1	26.8	- -
South Fork Canal	4/30	0	0.0	0.0	0.0 m
Trap Creek	4/29	T	T	4.3	5.4 h
Whaleback	c				

BASIC DATA SUPPLEMENT 1

MAY 1, 1970

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
KLAMATH WATERSHEDS					
Annie Spring	4/30	112	50.1	53.5	43.1
Beatty (PP&L)	c				
Billie Creek Divide	4/30	23	9.3	22.7	13.9[h]
Bly Mountain	4/30	0	0.0	0.0	0.9[m]
Bly 101 Ranch (PP&L)	c				
Chemult	4/30	0	0.0	0.1	0.8[h]
Chiloquin (PP&L)	c				
Cold Springs Camp	4/28	74	29.7	41.5	- -
Crazyman Flat[e]	4/30	6	1.3	5.8	- -
Crowder Flat[e] (Calif.)	c				
Crystal (PP&L)	c				
Diamond-Crater Summit	4/24	66	27.6	37.0	36.1[h]
Diamond-Crater Sum. (Alt.)	4/24	65	25.6	- -	- -
Diamond Lake Junction (97)	4/24	0	0.0	0.0	0.0[h]
Dog Hollow[e]	c				
Finley Corrals	4/30	20	7.4	10.6	- -
Fort Klamath (PP&L)	c				
Fourmile Lake	4/30	46	20.2	27.8	21.6[h]
Gerber	c				
Harriman (PP&L)	c				
Hyatt Prairie Reservoir	c				
Kirk (PP&L)	c				
Lake of the Woods	4/28	7	2.1	9.2	6.3[h]
Park Headquarters	4/29	142	62.2	68.4	59.1
Pelican Guard Station	4/28	0	0.0	0.0	0.0[h]
Quartz Mountain	4/29	0	0.0	0.0	0.6[h]
Quartz Mtn. (Extension)	4/29	0	0.0	0.0	- -
Quartz Mtn. (PP&L)	DISCONTINUED				
Seven Lakes #2	c				
Seven Mile	c				
State Line[e] (Calif.)	c				
Strawberry	5/1	0	0.0	2.9	1.4[h]
Summer Rim[e]	4/30	48	17.8	10.7	- -
Sun Mountain	4/29	42	18.3	25.3	- -
Sycan Flat[e]	c				
Taylor Butte	4/30	0	0.0	0.4	- -
LAKE COUNTY, GOOSE LAKE WATERSHEDS (Continued)					
Adin Mountain (Calif.)	4/29	22	8.2	9.6	3.4
Bald Mountain (Nev.)	c				
Bear Flat Meadow[e]	c				
Camas Creek	4/28	6	1.2	5.6	- -
Cedar Pass (Calif.)	5/1	40	14.7	18.5	9.5
Colvin Creek[e]	c				
Cox Flat[e]	c				
Crowder Flat[e] (Calif.)	c				
Dismal Swamp[e] (Calif.)	c				
Finley Corrals[e]	4/30	20	7.4	10.6	- -
Hart Mountain (Continued)	c				

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR: Date of Survey	Snow Depth (In.)	Water Cont. (In.)	PAST REC.: Water Content (inches) Last Yr.	Ave.[i]
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Little Bally Mtn.[e] (Nev.)	c				
Mt. Bidwell (Calif.)	c				
North Star (Calif.)	c				
Patton Meadows[e]	4/30	43	15.9	15.8	- -
Quartz Mtn. (PP&L)	DISCONTINUED				
Quartz Mountain	4/29	0	0.0	0.0	0.6[h]
Quartz Mtn. (Extension)	4/29	0	0.0	0.0	- -
Sherman Valley[e]	c				
Silver Creek	c				
State Line[e] (Calif.)	c				
Strawberry	5/1	0	0.0	2.9	1.4[h]
Summer Rim[e]	4/30	48	17.8	18.7	- -
Sycan Flat[e]	c				
Willow Creek[e]	c				
HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	4/29	42	18.6	5.0	8.4[h]
Buck Pasture[e]	c				
Buckskin Lake[e]	c				
Call Meadows[e]	c				
Crow Camp[e]	c				
Delintment Lake	c				
Denio Creek[e]	c				
Disaster Peak (Nev.)	c				
Emigrant Butte	c				
Fish Creek	c				
Hart Mountain[e]	c				
Idlewild Camp	4/29	0	0.0	0.0	0.9[h]
Izee Summit	4/27	12	4.7	0.0	1.8[h]
Lake Creek R. S.	4/29	18	7.5	- -	- -
Lake Creek (New Tangent)	4/29	17	7.2	- -	- -
Oregon Canyon[e]	c				
Rock Spring	4/29	T	T	0.0	0.4[m]
Silvies	c				
Snow Mountain	c				
Starr Ridge	4/27	4	1.7	0.0	0.6[h]
Stinking Water	5/1	0	0.0	0.0	- -
Trout Creek[e]	c				
"V" Lake[e]	c				

BASIC DATA SUPPLEMENT 2

MAY 1, 1970

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average m
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	c			
Big Bend (Nev.)	6700	48	16.7	4/27	16.7	16.5	
Blue Mountain Spring	5900	42	16.9	4/29	12.3	12.5	13.2
Crane Prairie	5375	48	18.2	4/29	18.1	18.0	17.7
Folly Farm	4450	30	12.5	c		- -	- -
Jack Creek, Lower (Nev.)	6800	48	8.6	4/28	8.1	8.3	
Jordan Valley	4390	48	19.3	5/1	16.5	16.9	- -
Mud Flat (Ida.)	5500	48	12.8	c			
Rodeo Flat (Nev.)	6800	42	11.0	4/27	11.0	11.0	
Stinking Water Summit (DISCONTINUED)							
Taylor Canyon (Nev.)	6200	48	15.1	4/27	11.8	15.0	14.6
Triangle (Ida.)	5150	48	16.6	c		- -	- -
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8	4/30	16.0	16.2	14.6
Dooley Mountain	5430	36	9.2	4/27	7.0	7.0	6.8
Emigrant Springs	3925	48	22.3	4/30	21.2	21.6	20.9
Ladd Summit	3730	48	18.9	4/30	13.4	13.5	11.8
Moss Springs	5850	36	25.8	4/29	14.6	15.7	- -
Tollgate	5070	48	23.6	4/29	18.5	18.1	17.9
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Athena-Weston (DISCONTINUED)							
Battle Mountain Summit	4340	48	13.8	5/1	13.8	13.8	13.4
Emigrant Springs	3925	48	22.3	4/30	21.2	21.6	20.9
Tollgate	5070	48	23.6	4/29	18.5	18.1	17.9
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	5/1	13.8	13.8	13.4
Beech Creek	4800	48	21.3	4/27	16.7	17.6	16.3
Blue Mountain Spring	5900	42	16.9	4/29	12.3	12.5	13.2
Blue Mountain Summit	5100	36	16.8	4/30	16.0	16.2	14.6
Derr	5670	24	9.0	c		- -	- -
Marks Creek	4540	36	14.1	4/23	13.2	13.4	13.1
Snow Mountain	6300	48	16.7	c		- -	- -
Starr Ridge	5150	36	10.6	4/27	10.6	10.6	10.4
Williams Ranch	4500	42	17.9	4/27	16.4	17.6	16.8
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	c		- -	- -
Marks Creek	4340	36	14.1	4/23	13.2	13.4	13.1
Snow Mountain	6300	48	16.7	c		- -	- -
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS							
Cooper Spur	3490	72	26.4	4/30	14.3	14.2	- -
KLAMATH WATERSHEDS							
Bly Mountain	5090	42	14.0	4/30	12.3	12.8	12.3

BASIC DATA SUPPLEMENT 2

MAY 1, 1970

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average [m]
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	4/28	13.0	13.6	13.1
Quartz Mountain	5230	48	15.3	4/29	10.0	9.8	9.4
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	4/29	12.3	12.5	13.2
Fish Creek	7900	48	15.0	[c]		- -	- -
Folly Farm	4450	30	12.5	[c]		- -	- -
Silvies	6900	48	16.4	[c]		- -	- -
Snow Mountain	6300	48	16.7	[c]		- -	- -
Starr Ridge	5150	36	10.6	4/27	10.6	10.6	10.4
Stinking Water (DISCONTINUED)							
Willow-Bald	5000	24	6.6	4/30	6.0	6.6	- -

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 3

MAY 1, 1970

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precip-itation	Last Year	Average
Aneroid Lake #2 (Wallowa County)	7400	3/27 to 4/28	1.00		
Anthony Lake (Baker County)	7150	3/23 to 4/30	9.50		
Arbuckle Mountain (Morrow County)	5400	3/25 to 4/30	3.55		
Camas Creek (Lake County)	5825	3/28 to 4/28	2.60		
County Line (Umatilla County)	4800	3/31 to 4/30	1.70		
Dooley Mountain (Baker County)	5200	3/26 to 4/27	0.65		
Granite Mountain (Grant County)	5900	3/25 to 4/24	2.70		
Quartz Mountain Summit (Lake County)	5530	3/31 to 4/29	1.28		
Strawberry (Lake County)	5760	3/27 to 5/1	1.40		
Taylor Butte (Klamath County)	5040	3/26 to 4/30	0.20		
Taylor Green (Union County)	5800	3/31 to 4/29	2.60		

OWYHEE, MALHEUR WATERSHEDS (1)

Owyhee River

Number	Name		Sec	Twp	Rge	Elev
[illegible]	Antelope Ridge	(Ida)	20	8S	1E	5900
[illegible]	Battle Creek	(Ida)	10	11S	1E	5700
[illegible]	Bear Creek	(Nev)	31	46N	58E	7800
[illegible]	Big Bend	(Nev)	30	45N	56E	6700
[illegible]	Blue Mtn Pass		4	38S	42E	5290
[illegible]	Buckskin, Lower	(Nev)	25	45N	39E	6700
[illegible]	Buckskin, Upper	(Nev)	11	45N	39E	7200
[illegible]	Bull Basin	(Ida)	29	12S	5W	5600
[illegible]	Columbia Basin	(Nev)	31	44N	53E	6650
[illegible]	Disaster Peak	(Nev)	8	47N	34E	6500
[illegible]	Fawn Creek	(Nev)	2	45N	52E	7000
[illegible]	Fish Creek		4	33S	33E	7900
[illegible]	Folly Farm Summit		8	30S	38E	4450
[illegible]	Fox Creek	(Nev)	33	46N	58E	6800
[illegible]	Fry Canyon	(Nev)	31	43N	54E	6700
[illegible]	Gold Creek	(Nev)	31	45N	56E	6600
[illegible]	Granite Peak	(Nev)	22	44N	39E	7800
[illegible]	Hyde Pasture	(Ida)	31	8S	2W	5800
[illegible]	Jack Creek, Lower	(Nev)	18	42N	53E	6800
[illegible]	Jack Creek, Upper	(Nev)	9	42N	53E	7250
[illegible]	Jack Peak	(Nev)	28	42N	53E	8420
[illegible]	Jordan Valley		2	30S	46E	4390
[illegible]	Laurel Draw	(Nev)	20	45N	53E	6700
[illegible]	Lookout Butte		2	40S	47E	5650
[illegible]	Louse Canyon		27	40S	44E	6440
[illegible]	Martin Creek	(Nev)	18	44N	40E	6700
[illegible]	Merritt Mountain	(Nev)	10	46N	54E	7000
16H3AP	Midas	(Nev)	18	39N	46E	7200
16G7MP	Mud Flat	(Ida)	34	9S	2W	5500
17G5a	Oregon Canyon		9	40S	40E	6950
17H6a	Quinn Ridge	(Nev)	9	47N	41E	6300
16G11a	Red Canyon	(Ida)	32	11S	4W	6500
15H6MP	Rodeo Flat	(Nev)	36	43N	53E	6800
15H3A	76 Creek	(Nev)	6	44N	58E	7100
16F3AP*	Silver City	(Ida)	6	5S	3W	6400
18G1MPA	Silvies		35	32S	32½E	6900
16G1P	South Mountain No. 2	(Ida)	10	8S	5W	6340
15H19a	Stag Mountain	(Nev)	32	41N	58E	7800
16F6a	Succor Creek	(Ida)	25	3S	5W	6100
15H9MP	Taylor Canyon	(Nev)	35	39N	53E	6200
16H7a	Toe Jam	(Nev)	29	40N	50E	7700
15H8	Tremewan Ranch	(Nev)	9	39N	55E	5700
16G4MA	Triangle	(Ida)	25	7S	3W	5150
18G5a	Trout Creek		10	41S	38E	7800
18G7a	"V" Lake		31	35½S	32½E	6600
16G12a	Vaught Ranch	(Ida)	10	11S	1W	5950
16G13a	War Eagle	(Ida)	20	5S	3W	7700

Malheur River

Number	Name	Sec	Twp	Rge	Elev
18E14	Barney Creek	16	14S	36E	5950
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18F6a	Buck Pasture	21	29S	35E	5700
18E21a	Bully Creek	10	17S	37E	5300
18F7a	Call Meadows	29	20S	33E	5340
17F2a	Cottonwood-Indian	10	19S	39E	4320
18E19M	Crane Prairie	24	16S	34E	5375
18F8a	Crow Camp	26	23S	34E	5500
18E20	Eldorado Pass	20	14S	38E	4600
18E26a	Flag Prairie	32	16S	36E	4750
18E18	Lake Creek	10	16S	33½E	5120
18E22a	Logan Valley	13	16S	33½E	5100
18F1	Rock Spring	23	18S	32E	5100
18E32p*	S. Fk. Willow Cr.	2	16S	37E	5500
18F4P	Stinking Water	33	21S	34E	4800

BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS (2)

Burnt River

Number	Name	Sec	Twp	Rge	Elev
18E14	Barney Creek	16	14S	36E	5950
18E13M	Blue Mountain Summit	6	12S	36E	5098
17E1MP	Dooley Mountain	32	11S	40E	5430
18E20	Eldorado Pass	20	14S	38E	4600
18E8	Gold Center	21	9S	36E	5340
18E9P	Tipton	34	10S	35½E	5100

Powder River

Number	Name	Sec	Twp	Rge	Elev
18E1P	Anthony Lake	18	7S	37E	7125
18E33	Anthony Ski Hill	12	7S	36E	7800
18E5	Bourne	33	8S	37E	5800
17E1MP	Dooley Mountain	32	11S	40E	5430
18E3	Ellertson Meadows	18	8S	38E	5400
18E8	Gold Center	21	9S	36E	5340
18E6A	Goodrich Lake	4	9S	38E	6775
18E29	Intake House	5	8S	38E	4930
17D12m	Ladd Summit	5	5S	39E	3730
18E23	Little Alps	10	7S	37E	6200
18E30	Little Antone	1	7S	37E	5000
18E28	Power Plant	33	7S	38E	3990
17D7P	Taylor Green	3	6S	42E	5740

Pine Creek

Number	Name	Sec	Twp	Rge	Elev
17D8	Schneider Meadows	35	6S	45E	5400

Grande Ronde River

Number	Name	Sec	Twp	Rge	Elev
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
18E1P	Anthony Lake	18	7S	37E	7125
17D10a	Bald Mountain	14 & 15	4S	41E	6700
18D9	Beaver Reservoir	8	5S	37E	5340
18D8P	County Line	28	4S	34E	4800
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
17D13a	Mirror Lake	34	4S	44E	8200
17D6M	Moss Spring	28	3S	41E	5850
18D7	Schoolmarm	28	4S	34E	4775
17D11a	Standley	28	2S	42E	7400
17D7P	Taylor Green	3	6S	42E	5740
18D3M	Tollgate	32	4N	38E	5070
17D16a	TV Ridge No. 2	12	2S	43E	7000

Imnaha River

Number	Name	Sec	Twp	Rge	Elev
17D1	Aneroid Lake No. 1	16	4S	45E	7480
17D2P	Aneroid Lake No. 2	16	4S	45E	7300
17D14a	Big Sheep	33	4S	46E	6200

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS (3)

Umatilla River

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D14m	Athena-Weston Summit	21	4N	35E	1700
18D12MP	Battle Mountain Summit	29	3S	31E	4340
18D4M	Emigrant Springs	29	1N	35E	3925
18D6P	Lucky Strike	28	3S	32E	5050
18D5	Meacham	24 & 25	1S	35E	4300
18D3M	Tollgate	32	4N	38E	5070
18D13	Walla Walla Diversion	22	6N	38E	2400

Walla Walla River

Number	Name	Sec	Twp	Rge	Elev
18D16	Blue Mountain Camp	35	4N	37E	4300
18D3M	Tollgate	32	4N	38E	5070
18D17	Weston Mountain	25	4N	35E	2700

Willow Creek

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18E1P	Anthony Lake	18	7S	37E	7125

UPPER JOHN DAY WATERSHEDS (4)

Upper John Day River

Number	Name	Sec	Twp	Rge	Elev
19D2P	Arbuckle Mountain	33	4S	29E	5400
18D12MP	Battle Mountain Summit	29	3S	31E	4340
19E2M	Beech Creek Summit	4	12S	30E	4800
18E16MP	Blue Mountain Springs	21	15S	35E	5900
18E13M	Blue Mountain Summit	6	12S	36E	5098
19E3MP	Derr	14	13S	23E	5670
18E27a	East Fork Canyon	15	15S	32E	5700
18E8	Gold Center	21	9S	36E	5340
18E24a	Indian Cr. Butte	5	15S	33E	6550
19E9P	Izee Summit	28	16S	29E	5293
18D6P	Lucky Strike	28	3S	32E	5050
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
18E7a	Olive Lake	14	9S	33½E	6000
18D7	Schoolmarm	28	4S	34E	4775
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18E9P	Tipton	34	10S	35½E	5100
18E25MP	Williams Ranch	20	15S	32E	4500

UPPER DESCHUTES, CROOKED WATERSHEDS (5)

Upper Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21E11	Black Pine Spring	14	16S	9E	4600
21F8	Caldwell Ranch	30	21S	9E	4400
22F3	Cascade Summit	7	23S	6E	4880
21F11	Chemult	21	27S	8E	4760
21F20P	Deer Creek	25	20S	7E	4554
21E6	Hogg Pass	24	13S	7½E	4755
21F4	Hungry Flat	30	18S	11E	4400
21F6*	Irish-Taylor	25	20S	6E	5500
21F17	Mowich	29	25S	8E	4700
21F10	New Crescent Lake	11	24S	6E	4800
21E16	New Dutchman Flat #2	21	18S	9E	6400
21F3	Tangent	28	18S	10E	5400
21E15	Three Creeks Butte	27	16S	9E	5200
21E13	Three Creeks Meadows	34	16S	9E	5650
22F2P	Waldo Lake	15	21S	6E	5500
22F14*	Willamette Pass	33	24S	5½E	5600
22F15	Windigo Pass	32	25S	6E	5800

Crooked River

Number	Name	Sec	Twp	Rge	Elev
19E3MP	Derr	14	13S	23E	5670
20E1MP	Marks Creek	25	12S	19E	4540
20E2	Ochoco Meadows	21	13S	20E	5200
19F1M	Snow Mountain	1	19S	26E	6300
19E4	Tamarack	8	15S	25E	4800

HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS (6)

Hood River

Number	Name	Sec	Twp	Rge	Elev
21D6P	Brooks Meadows	2	2S	10E	4300
21D25M	Cooper Spur	6	2S	10E	3490
21D1	Greenpoint Reservoir	28	2N	9E	3400
21D20	Knebal Springs	31	1S	11E	3850
21D23	Parkdale	5	1S	10E	1770
21D8*	Phlox Point	7	3S	9E	5400
21D4	Red Hill	20	1S	9E	4400
21D9	Still Creek	25	3S	8½E	3670
21D28	Switchback	28	1S	9E	3255
21D7P	Tilly Jane	15	2S	9E	6000
21D21	Ulrich Ranch Junction	28	1S	11E	3350
21D30	Umbrella Falls	3	3S	9E	5400
21D24	Upper Valley	20	1S	10E	2530

Mile Creeks - Mosier Creek

Number	Name	Sec	Twp	Rge	Elev
21D6P	Brooks Meadows	2	2S	10E	4300
21D20	Knebal Springs	31	1S	11E	3850
21D21	Ulrich Ranch Junction	28	1S	11E	3350

Lower Deschutes River

Number	Name	Sec	Twp	Rge	Elev
21D12	Clear Lake	29	4S	9E	3500
21D22	Clear Lake Experimental	29	4S	9E	3500
21E6	Hogg Pass	24	13S	7½E	4755

LOWER COLUMBIA WATERSHEDS (7)

Sandy River

Number	Name	Sec	Twp	Rge	Elev
21D8*	Phlox Point	7	3S	9E	5400
21D9	Still Creek	25	3S	8½E	3670

WILLAMETTE WATERSHEDS (8)

Clackamas River

Number	Name	Sec	Twp	Rge	Elev
21D3	Clackamas Lake	35	5S	8½E	3400
21D12	Clear Lake	29	4S	9E	3500
21D14P*	Peavine Ridge	14 & 15	6S	7E	3500
21D8*	Phlox Point	7	3S	9E	5400
21D9	Still Creek	25	3S	8½E	3670

Santiam River

Number	Name	Sec	Twp	Rge	Elev
22E1	Detroit (City)	1	10S	5E	1610
22E2	Detroit Dam	7	10S	5E	1580
21E6	Hogg Pass	24	13S	7½E	4755
21E4	Marion Forks	28	11S	7E	2730
22E3	Mill City	29	9S	3E	826
21E5	Santiam Junction	14	13S	7E	3990
21E3	Whitewater Bridge	28	10S	7E	2175

McKenzie River

Number	Name	Sec	Twp	Rge	Elev
21E8	Dead Horse Grade	13	16S	7E	3800
22E4	Lost Creek Ranch	24	16S	6E	1956
21E7	McKenzie	35	15S	7½E	4800
22E5	McKenzie Bridge	13	16S	5E	1372
22E6	Vida	28	16S	2E	800
21E9	White Branch Slide	15	16S	7E	2800

Middle Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F3	Cascade Summit	7	23S	6E	4880
22F6	McCredie Springs	36	21S	4E	2120
22F8	Meridian Dam	13	19S	1W	750
22F7	Oakridge	16	21S	3E	1310
22F5	Railroad Overpass	21	22S	5E	2750
22F4	Salt Creek Falls	32	22S	5½E	4000
22F2P	Waldo Lake	15	21S	6E	5500
22F14*	Willamette Pass	33	24S	5½E	5600

Coast Fork Willamette River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F10	Golden Curry Creek	1	23S	1E	3136
22F13	Layng Creek R. S.	31	21S	1E	1200
22F12	Lund Park	22	22S	1E	1740
22F11	Weaver Creek	35	22S	1E	2440

Mary's River

Number	Name	Sec	Twp	Rge	Elev
23E1	Mary's Peak	21	11S	7W	3620

ROGUE, UMPQUA WATERSHEDS (9)

Rogue River

Number	Name	Sec	Twp	Rge	Elev
23G4P	Althouse	17	41S	7W	4530
22G6	Annie Spring	19	31S	6E	6018
22G28	Beaver Dam Creek	1	38S	4E	5100
22G21P	Big Red Mountain	31	40S	1W	6500
22G13P	Billie Creek Divide	30	36S	5E	5300
22G30	Caliban	16	40S	1E	6500
22G27	Deadwood Junction	8	38S	4E	4600
22F19	Diamond-Crater Summit	34	28S	6E	5800
22G14P	Fish Lake	3	37S	4E	4865
22G12	Fourmile Lake	9	36S	5E	6000
23G3	Grayback Peak	9	40S	5W	6000
22G26	Howard Prairie	32	38S	4E	4500
22G16	Hyatt Prairie Reservoir	15	39S	3E	4900
22G22	Little Red Mountain	25	40S	2W	6500
22G31	Mt. Ashland Switchback	15	40S	1E	6400
23G5	Page Mountain	8	41S	7W	4045
22G5	Park Headquarters	8	31S	6E	6450
22G11	Seven Lakes No. 2	26	33S	5E	6200
22G2	Silver Burn	30	30S	4E	3720
22G20	Siskiyou Summit	17	40S	2E	4630
22G32	Ski Bowl Road	22	40S	1E	6000
22G9	South Fork Canal	12	33S	3E	3500
22G1	Whaleback	3	31S	2E	5140

Umpqua River

Number	Name	Sec	Twp	Rge	Elev
22F9	Champion	12	23S	1E	4500
22F18P	Diamond Lake	29	27S	6E	5315
23G8	King Mountain No. 1	5	33S	4W	4500
23G9	King Mountain No. 2	4	33S	4W	4000
23G10	King Mountain No. 3	33	32S	4W	3648
23G11	King Mountain No. 4	33	32S	4W	3049
23G12	King Mountain No. 5	27 & 28	32S	4W	2380
23G13	King Mountain No. 6	20	32S	4W	1820
22F16	North Umpqua	19	26S	6E	4215
22F23	Red Butte No. 1	36	27S	2W	4560
22F24	Red Butte No. 2	30	27S	1W	4000
22F25	Red Butte No. 3	30	27S	1W	3500
22F26	Red Butte No. 4	30	27S	1W	3000
22F27	Red Butte No. 5	20	27S	1W	2500
22F28	Red Butte No. 6	17	27S	1W	2000
22F17	Trap Creek	1	27S	4E	3800
22G1	Whaleback	3	31S	2E	5140
22F15	Windigo Pass	32	25S	6E	5800

KLAMATH WATERSHEDS (10)

Klamath River

Number	Name		Sec	Twp	Rge	Elev
22G6	Annie Spring		19	31S	6E	6018
22G13P	Billie Creek Divide		30	36S	5E	5300
21G5M	Bly Mountain		15 & 22	37S	11E	5090
21F11	Chemult		21	27S	8E	4760
22G24*	Cold Springs Camp		12	35S	5E	6100
20G12a	Crazyman Flat		9	34S	15E	6100
20H2a	Crowder Flat	(Cal)	30	47N	11E	5200
22F19	Diamond-Crater Summit		34	28S	6E	5800
21F18	Diamond Lake Jct. (97)		1	29S	7E	4600
21G6a	Dog Hollow		1	40S	14E	4900
20G14a	Finley Corrals		11	36S	16E	6000
22G12	Fourmile Lake		9	36S	5E	6000
21G4P	Gerber		12	39S	13E	4850
22G26	Howard Prairie		32	38S	4E	4500
22G16	Hyatt Prairie Reservoir		15	39S	3E	4900
22G15	Lake of the Woods		11	37S	5E	4960
22G5	Park Headquarters		8	31S	6E	6450
22G25	Pelican Guard Station		9	36S	6E	4150
20G6MP	Quartz Mountain		2	38S	16E	5320
22G11	Seven Lakes No. 2		26	33S	5E	6200
22G33	Seven Mile		20	33S	6E	5725
20H1a	State Line	(Cal)	21	48N	11E	5750
20G9AP	Strawberry		4	40S	16E	5760
20G2AP	Summer Rim		15	33S	16E	7200
21G2	Sun Mountain		22	32S	7½E	5350
20G13a	Sycan Flat		25	31S	14E	5500
21G3P	Taylor Butte		21	33S	11E	5100

Pacific Power and Light Company's Snow Stations

Number	Name	Sec	Twp	Rge	Elev
1	Beatty (PP&L)	22	36S	12E	4300
10	Bly 101 Ranch (PP&L)	22	35S	14E	4800
3	Chiloquin (PP&L)	34	34S	7E	4187
4	Crystal (PP&L)	26	34S	6E	4200
5	Fort Klamath (PP&L)	22	33S	7½E	4150
8	Harriman Lodge (PP&L)	3	36S	6E	4200
6	Kirk (PP&L)	1	33S	7E	4533
9	Quartz Mountain (PP&L)	33	37S	16E	5504
12	Yamsey (PP&L)	20	31S	11E	4600

LAKE COUNTY, GOOSE LAKE WATERSHEDS (11)

Goose Lake

Number	Name		Sec	Twp	Rge	Elev
20G15a	Bear Flat Meadow		27	36S	19E	5900
20G8MP	Camas Creek		5	39S	21E	5720
20G11A	Cox Flat		16	37S	18E	5750
20H2a	Crowder Flat	(Cal)	30	47N	11E	5200
20H3a	Dismal Swamp	(Cal)	31	48N	16E	7200
20G17a	Patton Meadow		28	38S	18E	6800
20G6MP	Quartz Mountain		2	38S	16E	5320
20H1a	State Line	(Cal)	21	48N	11E	5750
20G9AP	Strawberry		4	40S	16E	5760
20G16a	Willow Creek		13	40S	21E	6020

Abert Lake

Number	Name	Sec	Twp	Rge	Elev
20G15a	Bear Flat Meadow	27	36S	19E	5900
20G18ap	Colvin Creek	12	36S	21E	6550
20G11A	Cox Flat	16	37S	18E	5750
20G14a	Finley Corrals	11	36S	16E	6000
20G4	Mill Creek	1	34S	17E	6200
20G6MP	Quartz Mountain	2	38S	16E	5320
20G10a	Sherman Valley	15	37S	21E	6600

Summer Lake

Number	Name	Sec	Twp	Rge	Elev
20G2AP	Summer Rim	15	33S	16E	7200

Silver Lake

Number	Name	Sec	Twp	Rge	Elev
21F12P	Silver Creek	25 & 26	29S	13E	4900
20G13a	Sycan Flat	25	31S	14E	5500

Warner Lake

Number	Name		Sec	Twp	Rge	Elev
20G8MP	Camas Creek		5	39S	21E	5720
20H3a	Dismal Swamp	(Cal)	31	48N	16E	7200
19G1a	Hart Mountain		1	36S	25E	6350
20G10a	Sherman Valley		15	37S	21E	6600
20G16a	Willow Creek		13	40S	21E	6020

Guano Lake

Number	Name		Sec	Twp	Rge	Elev
19H1	Bald Mountain	(Nev)	17	45N	21E	6720
19G1a	Hart Mountain		1	36S	25E	6350
19H4a	Little Bally Mt.	(Nev)	8	45N	19E	6600

HARNEY BASIN WATERSHED (12)

Silvies River - Silver Creek

Number	Name	Sec	Twp	Rge	Elev
18F7a	Call Meadows	29	20S	33E	5340
19F2	Delintment Lake	28	19S	26E	5600
19F3	Emigrant Butte	14	21S	27E	5000
18F3P	Idlewild Camp	27	20S	31E	5200
19E9P	Izee Summit	28	16S	29E	5293
18F1	Rock Spring	23	18S	32E	5100
19F1M	Snow Mountain	1	19S	26E	6300
19E7M	Starr Ridge	20	15S	31E	5150
18F4P	Stinking Water	33	21S	34E	4800
19F4m	Willow-Bald	19	22S	29E	5000

Donner Und Blitzen River

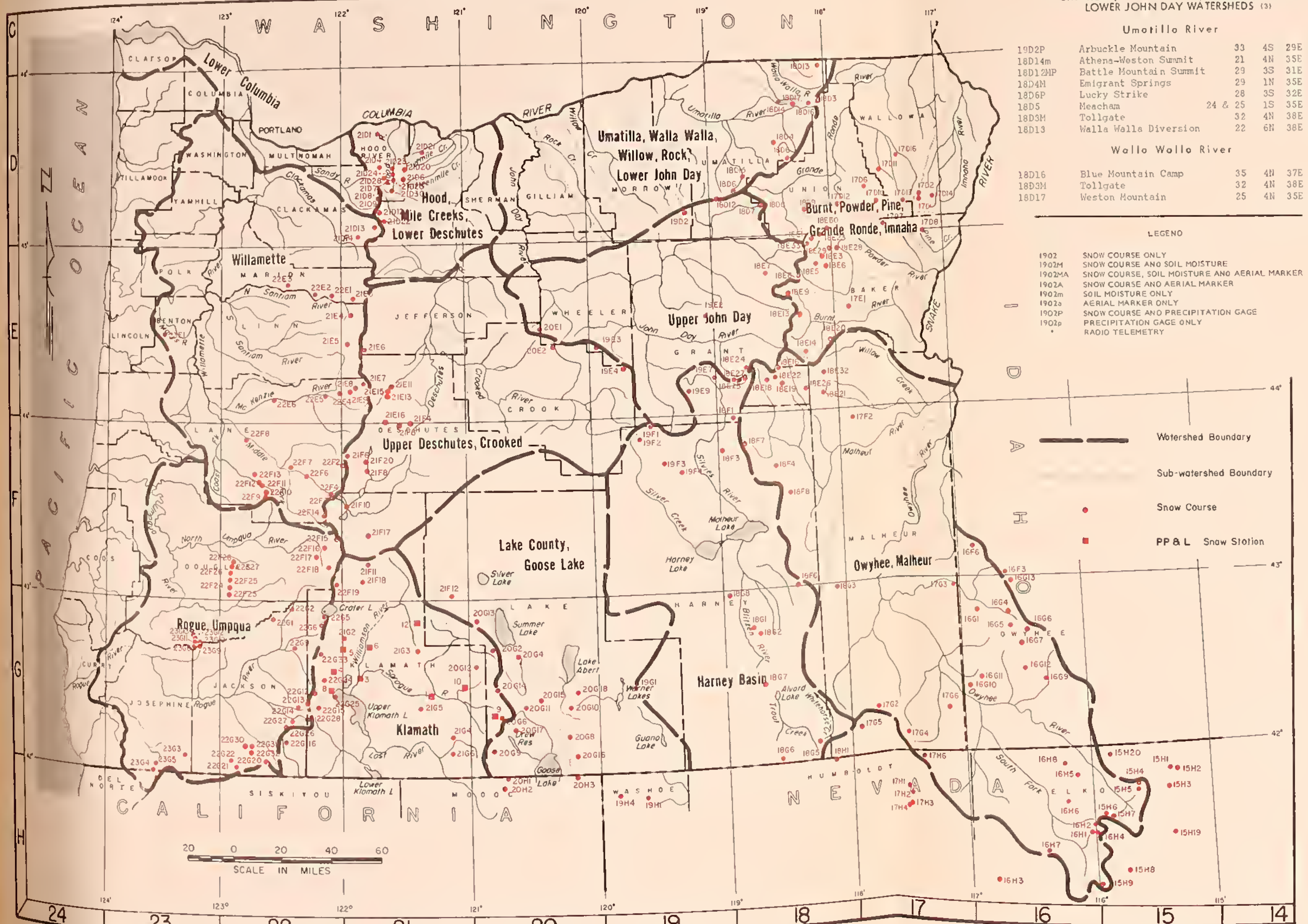
Number	Name	Sec	Twp	Rge	Elev
18F6a	Buck Pasture	21	29S	35E	5700
18G2MPA	Fish Creek	4	33S	32½E	7900
19G1a	Hart Mountain	1	36S	25E	6350
18G1MPA	Silvies	35	32S	32½E	6900
18G7a	"V" Lake	31	35½S	32½E	6600

Trout and Whitehorse Creeks

Number	Name		Sec	Twp	Rge	Elev
18G6a	Denio Creek		14	41S	34E	6000
18H1	Disaster Peak	(Nev)	8	47N	34E	6500
17G5a	Oregon Canyon		9	40S	40E	6950
18G5a	Trout Creek		10	41S	38E	7800

Harney Lake

Number	Name	Sec	Twp	Rge	Elev
18G8a	Buck kin Lake	2	30S	30E	5200



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- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY
- Douglas County Water Resources Survey

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